AMENDMENTS TO THE CLAIMS

1-12 (cancelled)

13. (Currently amended) A method of producing substantially globular ~~lyogels~~ aerogels wherein ~~in which the~~ gel forming components are mixed to produce a lyosol, after which the lyosol, in order to form a lyogel, is introduced into a moving medium which flows substantially against the direction of gravity, to form a substantially globular lyogel, and converting the substantially globular lyogel to an aerogel.

14. (Previously presented) A method according to claim 13, characterized in that the medium is air.

15. (Previously presented) A method according to claim 14, characterized in that the air contains at least one further gaseous medium.

16. (Previously presented) A method according to claim 14, characterized in that the lyosol is introduced dropwise into the moving air.

17. (Previously presented) A method according to claim 14, characterized in that the lyosol is sprayed into the moving air.

18. (Previously presented) A method according to at least one of claim 14, characterized in that the lyosol particles are screened according to size by the air stream which is directed in opposition to gravity.

19. (Previously presented) A method according to at least one of claim 14, characterized in

that the velocity of the air stream diminishes in the direction of flow.

20. (Previously presented) A method according to claim 13, characterized in that the lyosol particles are trapped in a layer of water.

21. (Previously presented) A method according to claim 13, characterized in that the lyosol particles are formed from silicic acid and mineral acid.

22. (Previously presented) A method according to claim 13, characterized in that the lyosol is formed from a sodium water-glass solution and hydrochloric acid.

23-24. (Cancelled)

25. (New) A method of producing substantially globular silylated lyogels in which the gel forming components are mixed to produce a lyosol, after which the lyosol, in order to form a lyogel, is introduced into a moving medium which flows substantially against the direction of gravity, to produce a substantially globular lyogel, and wherein the substantially globular lyogel is reacted with a silylating agent.